

WHAT IS CLAIMED IS:

1. A method for measuring a quantity of usage of a CPU, comprising:
 - reading execution time of a thread with a certain timer time interval and adding the values;
 - subtracting a total of execution time of a former stored thread from the grand total; and
 - measuring a quantity of usage of a CPU by dividing the subtracted execution time of the thread by the certain timer time.
2. The method for measuring the quantity of usage of the CPU according to claim 1, wherein the adding process for adding the execution time of the thread is performed repeatedly until there is the same value by comparing a total of values reading threads excluding the thread with a system thread value.
3. The method for measuring the quantity of usage of the CPU according to claim 2, wherein the adding process further comprises reading the all threads excluding the system thread sequentially after reading the system thread.
4. The method for measuring the quantity of usage of the CPU according to claim 1, wherein the quantity of usage of the CPU is compensated by finding an average value

between former measured quantities of usage of a CPU and a present measured quantity of usage of a CPU when the quantity of usage of the CPU suddenly varies.

5. The method for measuring the quantity of usage of the CPU according to claim 4, wherein the certain time timer interval is not greater than 10 seconds.

6. The method for measuring the quantity of usage of the CPU according to claim 4, wherein the present measured quantity of usage of the CPU is maintained as it is when the quantity of usage of the CPU does not vary suddenly.

7. The method for measuring the quantity of usage of the CPU according to claim 4, wherein the present measured quantity of usage of the CPU is maintained as it is when the quantity of usage of the CPU varies suddenly.

8. A method for measuring a quantity of usage of a CPU in a system, comprising:
reading execution time of all threads excluding a system thread with a certain timer time interval;
adding the read values;
subtracting a total of execution time of the former stored thread from the grand total;
and

measuring a quantity of usage of a CPU by dividing the subtracted execution time of the thread by the certain timer time.

9. The method for measuring the quantity of usage of the CPU according to claim 8, wherein the adding process for adding execution time of the thread is performed repeatedly until there is the same value by comparing a total of values read the all threads with the system thread value.

10. The method for measuring the quantity of usage of the CPU according to claim 8, wherein the adding process further comprises reading the all threads excluding the system thread sequentially after reading the system thread.

11. The method for measuring the quantity of usage of the CPU according to claim 8, wherein the quantity of usage of the CPU is compensated by finding an average value between the former quantity of usage of the CPU and the present measured quantity of usage of the CPU when the quantity of usage of the CPU varies suddenly due to the certain timer time interval.

12. The method for measuring the quantity of usage of the CPU according to claim 11, wherein the certain timer time interval is not greater than 10 seconds.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

13. The method for measuring the quantity of usage of the CPU according to claim 11, wherein the present measured quantity of usage of the CPU is maintained as it is when the quantity of usage of the CPU does not vary suddenly.

14. The method for measuring the quantity of usage of the CPU according to claim 11, wherein the present measured quantity of usage of the CPU is maintained as it is when the quantity of usage of the CPU varies suddenly.

15. A method for measuring CPU usage, comprising:
- (a) reading an execution time of a thread over a time interval;
 - (b) adding the execution times to obtain a grand total;
 - (c) reading a total execution time for a previously stored thread;
 - (d) subtracting the total execution time for the previously stored thread from the grand total to obtain a result; and
 - (e) outputting the result.

16. The method as set forth in claim 15, further comprising dividing the result by the time interval, to yield a usage percentage.

17. The method as set forth in claim 15, wherein the time interval does not exceed 10 seconds.
18. The method as set forth in claim 15, further comprising compensating the CPU usage by an amount indicative of a previous average usage.
19. The method as set forth in claim 15, further comprising outputting the total execution time to the register for CPU usage.
20. The method as set forth in claim 15, further comprising outputting the total execution time for availability to device drivers.
21. The method as set forth in claim 15, wherein the previously stored thread is the system thread.
22. The method as set forth in claim 21, wherein the step of adding execution times continues until the grand total minus the total execution time of the previously stored system thread substantially agrees with the new system thread total execution time.
23. The method according to claim 21, wherein the adding step further comprises

adding the execution times of all threads excluding the system thread, sequentially after the system thread.

24. The method according to claim 21, further comprising continually repeating steps (a)-(e).

25. The method according to claim 21, wherein the reading of the execution time is performed by an I/O device driver command.

26. The method according to claim 21, further comprising adjusting a clock pulse of the CPU in response to the grand total of execution times.